

WHAT IS CLAIMED IS:

1. A distribution unit for electric power and communications signals, particularly for heads of combination weighers, comprising a flexible printed circuit provided with a plurality of multipole connectors, at least one for
5 each head, said flexible circuit being mounted on a substantially cylindrical supporting structure arranged at a center of a combination weigher, said circuit carrying, by means of a plurality of electrically conducting tracks, an electric power supply and electronic communications, said multipole connectors finding continuity in complementary connectors provided in an
10 electronic board located in each weighing head.

2. The distribution unit according to claim 1, wherein said flexible printed circuit is formed flat and has a plurality of electrically conducting tracks, which have different dimensions depending on whether they are designed to carry medium or medium-high currents for medium or medium-high power
15 user devices and have a small cross-section for electronic communications.

3. The distribution unit according to claim 1, further comprising, with one or more different pitches, a plurality of holes that are adapted to allow insertion of terminals of the multiple connectors in order to perform soldering in predefined positions in particular in relation to the number of
20 heads of the combination weigher for which the distribution unit is intended.

4. The distribution unit according to claim 1, further comprising power supply connectors in order to facilitate wiring to the electrical system of the combination weigher.

5. The distribution unit according to claim 1, wherein said flexible printed
25 circuit is monolithically coupled to a substantially cylindrical or prism-like structure, to which said multipole connectors are also fixed.

6. The distribution unit according to claim 1, wherein the electronic boards of each head are inserted in said multipole connectors in the region where there is a comb of electrical contacts.

30 7. The distribution unit according to claim 1, wherein said substantially

cylindrical supporting structure has, at each one of said multiple connectors, at least one hole in which a pin is inserted for centering reasons, said pin being rigidly coupled to a metallic support that supports the electronic board and is associated with a weighing head.

- 5 8. The distribution unit according to claim 7, wherein said centering pin has a conical end and said centering hole has a flared insertion region.

9. The distribution unit according to claim 7, further comprising a plurality of centering holes and pins.

- 10 10. The distribution unit according to claim 1, wherein said flexible printed circuit has tracks for carrying the electric distribution alone to the boards of the heads.

11. The distribution unit according to claim 1, wherein said flexible printed circuit has tracks for carrying to the boards only the communications network or other signals of the analog or digital type.